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Source	<i>ERA - AARE Joint Conference, Singapore, 25-29 November 1996</i>

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Normal Technical Students' Perception of their Classroom Environment

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ABSTRACT

Research have indicated that students' perceptions of their classroom environment do affect their motivation to learn and determination to stay on in school. The pilot study suggests that the first cohort of Secondary One Normal (Technical) students were positive about their classes though there were occasional conflicts. This paper attempts a comparison of students' perceptions of their classroom environment from three perspectives: by level (Secondary 1 and Secondary 2 classes), stream (Normal Technical and Normal Academic), and gender. Results and implications for classroom teachers will be discussed.

Paper presented at the Joint Conference of the Educational Research Association, Singapore, and the Australian Association of Research in Education, 25-29, November, 1996, Singapore.

Introduction

Classroom practices and developments, particularly during the last three decades, have indicated that a positive classroom climate is needed for effective learning (Brophy & Putnam, 1979; Emmer, Evertson, & Anderson, 1980). This period also witnessed the emergence of a strong tradition of studying classroom climate through the perceptions of students and teachers (Fraser, 1986, 1994; Fraser & Walberg, 1991; MacAulay, 1990). Internationally, considerable interest has been shown in the conceptualisation, measurement and investigation of perceptions of psychosocial characteristics of classroom climate at the primary, secondary and higher education levels (Chavez, 1984; Fraser, 1986, 1989; Fraser, 1994; Fraser & Walberg, 1991; Walberg, 1979). Classroom

climate instruments have been used as sources of predictor and criterion variables in a variety of research studies. Use of student perceptions of actual classroom climate as predictor variables in numerous countries has established consistent relationships between the nature of the classroom climate and various student cognitive and affective outcomes (Fraser, 1986; Fraser & Fisher, 1982; Haertel, Walberg, & Haertel, 1981).

The study of learning environments made its appearance in Singapore recently with a study of student perceptions of computer-assisted classroom climates (Fraser & Teh, 1994; Teh & Fraser, 1994). Another study used the Individualised Classroom Environment Questionnaire (ICEQ) in exploring secondary students' perceptions of their classroom climate in different types of schools, streams and subject specialisations (Lim, 1993). A study by Wong & Fraser (1994) focused on determinants and effects of chemistry laboratory classroom climate in secondary schools. Goh & Fraser (1995) initiated a study in primary mathematics classroom. This study of students' perceptions of classroom climate in the Normal Technical and Normal Academic stream in secondary schools is the latest in the research of learning environments in Singapore. Much interest has been focused on this newly emerged group of Normal secondary students. Therefore, it is timely and beneficial for teachers and administrators to find out how this group of students view their classroom environment in the concerted effort to better motivate them to learn.

The Sample

Eight secondary schools (four government schools and four government-aided schools) provided a sample of 481 Normal (Technical) students and 76 Normal (Academic) students, making a total of 557 students. Of these, 274 students were from Secondary 1 classes and 283 from Secondary 2 classes. This sample also comprised 345 male and 212 female students.

The Instrument

Classroom environment was assessed with a modified version of the My Class Inventory (MCI; Fisher & Fraser, 1981; Fraser & O'Brien, 1985). The MCI was a simplified and shorter version of the Learning Environment Inventory (LEI). In adapting the MCI for use in this study, it was assumed that a positive classroom orientation, from the observations and experience of the researchers, would include students who were cohesive, cooperative, could get along, be task-oriented and enjoyed learning. The MCI used in this study measures five classroom climate scales of Cohesion, Competition, Friction, Task Orientation and Satisfaction. Each scale comprises five items, making altogether 25 items. Descriptive information for the MCI is provided in Table 1. Items in the My Class Inventory are arranged in cyclic order so that the first, second, third, fourth and fifth item in each group of five items assesses, respectively, Cohesion, Competition, Friction, Task Orientation and Satisfaction. Scores for a particular scale can be obtained by adding the scores for the five items in that scale. For example, the sum of the scores for items 1, 6, 11, 16 and 21 represents the scale score for Cohesion, while the total score for items 2, 7, 12,

17 and 22 represents the scale score for Competition. The higher the scale score, the more a class would demonstrate that particular dimension of the classroom climate. A three-point Likert rating scale consisting of 'Most of the Time', 'Sometimes' and 'Seldom' was used and was scored 3, 2 and 1, respectively.

Table 1
Descriptive Information for MCI Scales

Discussion and Results

Research has suggested that a positive classroom environment enhances and motivates student learning. The psychosocial dimensions emphasised in this study were the five classroom climate scales of Cohesion, Competition, Friction, Task Orientation and Satisfaction. The data were analysed for each of these scales and from three perspectives. Comparisons of student perceptions were examined by:

(1) level - whether the perceptions of Secondary 1 and Secondary 2 students were different
(2) stream - whether students from Normal Technical and Normal Academic classes perceived differently

(3) gender - whether boys or girls felt more positively about their

classrooms

Students' Perceptions of Classroom Climate by Level

The results presented in Table 2 suggested that students' perceptions of classroom climate in both secondary 1 and secondary 2 were quite similar. The students from both levels appeared to enjoy quite a positive classroom climate with a rather high level of Cohesion and Satisfaction and a low degree of Friction among students.

Table 2: Students' Perceptions of Classroom Climate by Class Level

However, one significant finding emerged for Task Orientation for both secondary 1 and 2 classes. It indicated that students perceived their classroom environments as not very task-oriented, and it was even less so in Secondary 2 classes. This suggested that as the students move up in their educational level, they could become less task-oriented. This could be regarded as a negative indication and should not be dismissed lightly. As task orientation is essential for effective learning to take place in classrooms, it would be worthwhile to examine further what could be done to help students be more on-task.

Students' Perceptions of Classroom Climate by Stream

With regard to students' perceptions by stream, it was quite obvious

that both the Normal Technical and Normal Academic students did not feel any considerable difference by virtue of their coming from different streams. In fact, the direction of perception was similar except that the Normal Academic students appeared to be slightly more cohesive and happy with their classrooms. Again, as in the case of the previous comparison by level, Task Orientation ranked lowest, as shown in Table 3. It seemed to suggest the same negative psychosocial dimension of low task orientation.

Table 3: Students' Perceptions of Classroom Climate by Stream

Students' Perceptions of Classroom Climate by Gender

The data concerning gender yielded an interesting significant difference between the boys' and girls' perceptions of their classroom climate. The significant difference for the scale Competition suggested that the boys were more competitive than the girls were. Gender views concerning classroom climate were generally similar in trend and direction as reflected in Table 4. Girls tend to view their classes a bit more favourably than the boys did. However, it must be noted that Task Orientation ranked lowest again in this gender analysis. This negative dimension prevailed in all three perspectives considered.

Table 4: Students' Perceptions of Classroom Climate by Gender

Implications for Schools

Having examined comparisons of the three perspectives presented in Tables 2, 3 and 4, it would be pertinent to state that generally there were consistently similar perceptions of the classroom environment among all the students and they were also similar in trends and directions. The findings revealed that the dimensions of Cohesion and Satisfaction dominated students' perceptions and this was a positive thing. Teachers would have to consider, perhaps, making conscious efforts to foster a sense of cohesion and bonding among all their students, irrespective of the type of classes they teach in, and the students, in turn, would find the environment satisfying and motivated

to learn in.

The finding that Task Orientation ranked lowest among the five classroom climate scales for all the three comparisons indicated that this negative characteristic need to be attended to. This implied that schools and teachers should think of more ways and means to motivate students to be more task-oriented and complete given work on time. Perhaps, more consistent and pragmatic approaches could be considered when managing learning activities and establishing procedures in the classrooms.

Conclusion

The findings revealed that the students, whether from Normal Technical or Normal Academic, viewed their classroom environments somewhat positively and in consistently similar directions. Cohesion and Satisfaction were positive dimensions that appeared strongly in all classes. Task Orientation, a negative psychosocial dimension, seemed to feature significantly in all the classes. In addition, boys appeared to view their classroom climate as more competitive than the girls did. Overall, these findings provided useful pointers for teachers and schools. It would be also beneficial for classroom teachers to increasingly sensitise themselves to these positive and negative characteristics of the classroom environment as there were hints that the secondary 2 students were not as positive in their perceptions of the classroom environment as the secondary 1 students.

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